

In the Claims:

Please amend the claims as follows:

1. (Currently Amended)      ~~Device~~ A device for the automatic opening and closing of reaction vessels, comprising:

holding device ~~(16)~~ for the non-rotatable holding of one or more reaction vessels; ~~(13)~~  
a gripper ~~(11)~~ for the gripping of a lid ~~(12)~~ for the reaction vessel ~~(13)~~, wherein the  
gripper ~~(11)~~ has gripping jaws ~~(20, 34)~~ effective to take hold of the lid ~~(12)~~, and the  
gripper has no active operating device for opening and closing the gripping jaws, and  
a rotating mechanism ~~(10)~~, for rotatable holding of the gripper ~~(11)~~; wherein  
characterised in that

the gripping jaws ~~(20, 34)~~ are arranged ~~in such a way so~~ that, when the lid ~~(12)~~ is  
inserted into the area between the gripping jaws ~~(20, 34)~~, it is held by the gripping jaws  
~~(20, 34)~~ through frictional contact, and the gripper (11) has no active operating device  
for opening and closing the gripping jaws (20, 34).

2. (Currently Amended)      ~~Device~~ The device according to claim 1, wherein  
characterised in that the gripping jaws ~~(20, 34)~~ have insertion slopes. ~~(27, 39).~~

3. (Currently Amended)      ~~Device~~ The device according to claim 1, wherein  
characterised in that

the gripping jaws ~~(20, 34)~~ have on their gripping surfaces ~~(25, 37)~~ one or more cutting  
webs ~~(28)~~ running at right-angles to the direction of rotation.

4. (Currently Amended)      ~~Device~~ The device according to claim 3, wherein  
characterised in that

the height by which the cutting web ~~(28)~~ projects beyond the gripping surface ~~(25, 37)~~  
is less than the wall thickness of the reaction vessels. ~~(13) and preferably not greater~~  
~~than 0.5 mm.~~

5. (Currently Amended)      ~~Device~~ The device according to ~~any of claims claim 1 to 4,~~  
wherein characterised in that the holding device ~~(16)~~ has a clamping mechanism to clamp and  
hold the reaction vessels ~~(13)~~.

6. (Currently Amended) ~~Device~~ A device for the automatic opening and closing of reaction vessels ~~in particular according to any of claims claim 1 to 5,~~ comprising:

a holding device (16) for the non-rotatable holding of one or more reaction vessels;

~~(13)~~

a gripper (11) for the gripping of a lid (12) for the reaction vessel (13), wherein the gripper (11) has gripping jaws (20, 34) effective to take hold of the lid (12); and

a rotating mechanism (10), for rotatable holding of the gripper (11); wherein

~~characterised in that~~

the holding device (16) has three perforated plates (41, 44, 45), arranged one above the other, ~~and with~~ each of the perforated plates having the plurality of openings (43) to hold the reaction vessels (13), wherein the top and bottom perforated plates (41, 44) are arranged so as to be stationary, with the openings (43) made in them in the top and bottom perforated plates being flush with one another, and the middle perforated plate (45) is designed to slide capable of sliding between a first position in which ~~its~~ the openings in the middle perforated plate (43) are aligned with the openings of the ~~other~~ top and bottom perforated plates, and a second position in which ~~its~~ the openings (43) are arranged somewhat offset relative to the openings (43) of the ~~other~~ perforated top and bottom perforated plates, so that a reaction vessel (13) inserted in the openings (43) of the perforated plates (41, 44, 45) is immobilized ~~clamped~~, and ~~that means (51) of for~~ fixing the middle perforated plate (45) in the second position are provided.

7. (Currently Amended) ~~Device~~ The device according to claim 6, wherein ~~characterised in that~~ the middle perforated plate (45) is mounted so as to slide in ~~only one~~ a single direction, the direction of sliding.

8. (Currently Amended) ~~Device~~ The device according to claim 7, wherein ~~characterised in that~~ the openings (43) in the direction of sliding are wider than those at right-angles to the direction of sliding.

9. (Currently Amended) ~~Device~~ The device according to claim 7 ~~or 8,~~ wherein ~~characterised in that each of the openings (43) of the middle perforated plate (45) contains a plurality of projection~~ projections (50) which extends each extending into the interior of ~~the~~ an opening (43) and is each projection being located roughly in the section area between a

centre line of the opening (43) ~~concerned~~ running in the direction of sliding, and the edge of the opening (43).

10. (Currently Amended) ~~Device~~ The device according to claim 9, wherein ~~characterised in that each of the openings (43) of the top and/or bottom perforated plate (41, 44) contains a plurality of projection~~ projections (50) which extends each extending into the interior of the an opening (43) and is arranged diametrically opposite the projections ~~projection (50) of the corresponding opening of the middle perforated plate (45).~~

11. (Currently Amended) ~~Device~~ The device according to ~~any of claims claim 6 to 10,~~ further comprising ~~characterised in that~~ means for moving and fixing (51) the middle perforated plate (45) in the second position ~~are provided.~~

12. (Currently Amended) ~~Robot with~~ A robot, comprising:  
a work platform (2);  
one or more handling arms (5, 6, 7); and  
~~characterised by a device according to any of claims claim 1 to 11,~~ wherein one handling arm (7) is provided with the rotating mechanism (10) for rotatable holding of the gripper (11).

13. (Currently Amended) ~~Robot~~ The robot according to claim 11, further comprising ~~characterised in that there is provided on the work platform a mount on a work platform for non-rotatable mounting of the holding device (16), for example by means of a locating device.~~